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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/502,462	10/21/2004	Takashi Yamaguchi	098670201568-US0	3957
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DARBY & DARBY P.C. P.O. BOX 770 Church Street Station New York, NY 10008-0770			EXAMINER DEODHAR, OMKAR A	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary**Application No.**

10/502,462

Applicant(s)

YAMAGUCHI, TAKASHI

Examiner

OMKAR A. DEODHAR

Art Unit

3714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 February 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 2, 5, 9, 10 and 16-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 5, 9, 10 and 16-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/08)
Paper No(s)/Mail Date 6/2/2009.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Final Rejection

Response to Arguments & Amendment

Applicant's arguments have been considered but are moot in view of the new grounds of rejection.

Examiner respectfully submits that Applicant's amendment significantly changed the scope of the claimed invention -- to the extent that restriction by original presentation would have been proper. Since the Examiner was not unduly burdened by this amendment, (& as a matter of courtesy), such a requirement was not made. Future divergence from the claims as currently submitted may result in restriction.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 2, 5, 9, 10 & 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wolf (US 6,457,681) in view of DeAngelis (US 6,247,994) in further view of Lyczek, (US 5,344,357 in yet further view of Katzer (US 6,270,040).

Claims 1, 2, 16-19: Wolf discloses a control and operating system for model trains (See, Abstract & Col. 5. Lines 11-13). Wolf discloses a controller & a model controlled based on data transmitted from the controller, the transmitted data corresponding to an operation of the controller for controlling an operation of the model. (See Col. 2. Line 60 - Col. 3. Line 6, disclosing two-way remote control communication between a user & a model train, utilizing a remote control on which various commands

are entered & a Track Interface Unit {TIU} that retrieves and processes the commands.) The TIU converts the commands to modulated signals which are sent down the track rails. The model train picks up the modulated signals, retrieves the entered command, and executes it through use of a processor and associated control and driver circuitry. The process may also be reversed, so that operating information regarding the train is provided back to the user for display on the remote control.

Wolf's TIU is interpreted as an accessory device & is provided separately from the controllers and the models, for conducting data communication with the controller and the model. (See Figure 1.) Wolf's also discloses a radio communication module for executing the data communication and for conducting bilateral data communication and a control device for implementing various controls based on data communication conducted through the radio communication module. (See Figures 4, 4A, Col. 3. Lines 2-5 & Col. 9 Lines 27-46.) This teaches a model traveling in accordance with information describing a correspondence between operation of the controller (user inputs) & an action of the model (movement of the model train on the tracks.)

While Wolf discloses that a user may control multiple trains on the same track (Col. 5. Lines 10-15) Wolf does not disclose a plurality of sets including a controller & a model.

In a related invention, DeAngelis presents a system and method for communicating with and controlling toy accessories with a plurality of sets including a controller & a model. (See DeAngelis, Figure 1.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the plurality of models and control sets as described by DeAngelis in the invention of Wolf for the purpose of allowing users of the sets to compete against one another. The advantage of having multiple sets of models and controllers DeAngelis writes, (column 1, lines 40-43) is that, "There is also a desirability, and even a need for play systems in which a plurality of vehicles can be remotely controlled by switches in hand-held pads to compete against one another..."

Wolf in view of DeAngelis teaches the invention as presented above but does not teach that each model comprises a detection device for detecting course position information upon passing a predetermined position on a race course & outputting a signal indicating the detected course position information & further: the control device for each model comprises: a device for making a predetermined decision concerning a course position based on the output signal of the detection device; and a device for generating data corresponding to a result of the decision & sending the data through the radio communication module of the model.

This is interpreted as requiring that each model has its own position detection device for outputting a signal indicating position upon passing a predetermined position such that that each model can make its own decisions concerning movement, based its the sensed position.

In a related invention, Lyczek teaches a remote controlled toy that can control itself while not under radio remote control by a user. (See Lyczek Col. 2. Lines 32-35) Specifically, Lyczek teaches sensors enabling the toy to detect objects in its path &

output signals activating switches so the toy can change its direction. (See Lyczek Col.

3. Lines 24-41.) This is Lyczek's relevant teaching.

It would have been obvious to a person of ordinary skill in the art at the time of Applicant's invention to provide a detection device on a model toy such that the toy can detect its position & make decisions concerning movement as taught by Lyczek in the model toy system rendered by Wolf in view of DeAngelis. This yields the predictable results of allowing model trains in the system of Wolf in view of DeAngelis to detect their position relative to objects to make their own decisions regarding movement. This would be beneficial because the model trains would be able to avert collisions.

Wolf in view of DeAngelis, as modified by Lyczek teaches the invention as presented above but does not teach a control device of the accessory device comprising: a device for receiving data sent from the model associated with the output signal of the detection device, the output signal being received through the radio communication module of the accessory device; a device for determining restrictions concerning the travel of at least one model, based on the received data; and a device for generating data corresponding to the determined restrictions and sending the generated data through the radio communication module of the accessory device, and the control device of the controller or the model comprises: a device for receiving data corresponding to the restrictions sent from the accessory device, through the radio communication module; and a device for setting the information describing the correspondence between operation of the controller and an action of the model based on the received data.

This is interpreted as requiring that an accessory device receives position information from a model & based on the received data, determines movement restrictions & then transmits the restrictions via radio communication to a control device of the model or the controller for implementing the restrictions.

In a related model train control system, Katzer teaches that it is known in the art for a software system to issue a stop command (a movement restriction) to a train if a collision is imminent. See Katzer Col. 45. Lines 37-57. While the software system does not preclude a user from transmitting control information via a controller, it alters the train's movement by sending a stop command to a moving train. Katzer further discloses that his system overcomes prior art shortcomings (such as user overrides resulting in collision) by modifying a user's command to ensure that the stop command overrides a user command. See Katzer Col. 46. Lines 31-38. The calculation to determine an imminent collision & issue a subsequent stop command is interpreted as teaching processing received position data. A stop command halting movement to avoid collision is interpreted as an alternate path selected from a possible set of data maps for model movement.

Wolf teaches a TIU as presented above which may receive operation information from the models & relay it back to the user. The TIU may also transmit control information to the model trains.

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to incorporate Katzer's stop command for avoiding collisions into the model train system rendered by Wolf in view DeAngelis, as modified by Lyczek. This

is considered a substitution of known elements with the predictable results of avoiding train collisions on a model track. This modification would function by using Wolf's TIU accessory device to receive position information, execute processing based on the received data & send control information (the stop command) via Wolf's radio communication interface to the model trains.

Claim 5: The prior art combination of Wolf, DeAngelis, Lyczek & Katzer teaches an accessory device configured to generate & send the generated data as broadcast data intended for a plurality of controllers & a receiving device of the controller configured to receive the broadcast data. (As explained with respect to claim 1, Wolf's TIU {accessory device} may relay operating information back to the user; on users' controllers' via an LCD as in Wolf's Figure 2.)

Claim 9: The prior art combination of Wolf, DeAngelis, Lyczek & Katzer teaches overriding a user command to issue a stop command to prevent train collision. (See the discussion of Katzer's overriding stop command, with respect to claim 1. This teaches changing a relationship between a quantity of an operation of the controller concerning a specific action of the model {a user command to allow model movement, possibly resulting in collision} & a quantity of control concerning the specific action of the model according to the restrictions {a stop commands that changes user control by preventing train movement to avoid collision}).

Claim 10: Wolf discloses that either and IR or RF signal may be used as a means of communication in his invention. (See Wolf Col. 5. Lines 48-55). As Bluetooth is a radio frequency (RF) communications standard, this would meet the applicant's

limitation of having a toy system, wherein the radio communication module is based on Bluetooth standards.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **OMKAR A. DEODHAR** whose telephone number is (571)272-1647. The examiner can normally be reached on M-F: 8AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dmitry Suhol can be reached on 571-272-4430. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/OAD/

/Corbett Coburn/
Primary Examiner
AU 3714